


**PRESSURE SENSITIVE SCROLLBAR FEATURE**

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**Inventor:** ALLEN TIMOTHY P (US); GILLESPIE DAVID (US);  
FERRUCCI AARON T (US)  
**Applicant:** SYNAPTICS INC (US)  
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A proximity sensor system includes a sensor matrix array having a characteristic capacitance on horizontal and vertical conductors connected to sensor pads. The capacitance changes as a function of the proximity of an object to the sensor matrix. The change in capacitance of each node in both the X and Y directions of the matrix due to the approach of an object is converted to a set of voltages in the X and Y directions. These voltages are processed by circuitry to develop electrical signals representative of the centroid of the profile of the object, i.e., its position in the X and Y dimensions. Noise reduction and background level setting techniques inherently available in the architecture are employed. Pressure information is used to modify the scrolling speed.

